

REMARKS

The Applicant appreciates the thorough review of the application by the Examiner. Reconsideration and allowance are requested.

No new matter has been added by the amendments. No new issues are raised by the amendments. The specification and claims have been amended as suggested by the Examiner.

The abstract has been amended to substitute "and/or" for "and/of".

Claims 1 - 8 are patentable under 35 U.S.C. 112, second paragraph.

The claims have been amended as suggested by the Examiner. Claim 1 has been amended to replace "and/or" for "and/of". Claims 2 and 3 have been amended by removing "means of". Claim 6 has been amended to remove the expression "for instance, a stepped shape". Claim 7 has been amended to remove the parentheses.

No new matter has been added by the amendments. Claims 1 - 8 are patentable under 35 U.S.C. 112, second paragraph.

Claims 1 and 3 are patentable under 35 U.S.C. 102(b) over Wagner et al. (U.S. Patent No. 5,809,647).

Claim 1 describes a method for manufacturing components that appear in a weaving machine and are made in one piece. The method includes one or more first and second parts, said parts being manufactured in separate first and second parts and being joined together to form a whole by means of processes which practically do not change the cross-section of said parts. The first and second parts have different mechanical and/or magnetic and/or tribological

properties; and/or a different manufacturing method; and/or different shape properties according to their functional requirements in the component.

Wagner discloses a process for manufacturing ribbed tubing. A stainless steel tube is ribbed by wrapping a copper strip helically around the tube. Laser heating is applied to the steel tube and the copper strip is bonded to the outside of the steel tube upon solidification of the melted tube material. The copper strip is placed such that a small surface area is bonded to the steel tube and a large surface area extends radially outward from the steel tube for heat exchange purposes.

The creation of a ribbed tube in Wagner does not anticipate the Applicant's novel invention.

Claim 1 of the Applicant's invention describes components "joined together to form a whole by means of processes which practically do not change the cross-section of said parts". In order for the Applicant to accomplish the joining, the first and second parts must be joined lengthwise or linearly. In contrast, the ribbed tubes of Wagner are created by joining a copper strip perpendicular to an outer surface of the steel tube. The joining in Wagner increases the cross section of the individual parts, primarily the steel tubing. Wagner cannot join parts without increasing the individual cross sections of the parts. Therefore, Wagner does not anticipate claim 1 of the Applicant's invention.

In fact, Wagner must increase cross sectional area in order to function as a heat exchanger. One of the key features of Wagner is the increase in cross sectional area for transferring heat. If the components of Wagner were joined lengthwise or end to end, the ribbed tubing would not function in a useful manner. Wagner cannot function by joining components without increasing cross sectional area of the elements.

The Applicant's invention is used to create components in weaving machines. The components are not intended to function as heat exchangers like the devices in Wagner. The components created by the Applicant's invention do not have increased cross sectional dimensions. The components are attached in a linear fashion to overcome the deficiencies in previous devices. (See, for example, specification pages 1 - 2). Previous devices necessarily were manufactured with materials that were not ideal for each section of the entire component. Because each segment of a component requires different material properties, a balance must be struck to select a material that would function adequately. However, by selecting a material that will work in all zones, not all of the zones receive ideal materials. The Applicant's invention overcomes this limitation by joining components in a linear direction with ideal materials at each individual segment of a larger component.

Therefore, claim 1 is patentable over Wagner.

Claim 3 is dependent on independent claim 1. Claim 3 adds to the patentable features of claim 1 that said first and second parts are joined together by resistance welding or laser beam welding. This is not found in Wagner.

Therefore, claims 1 and 3 are patentable over Wagner.

Claim 1 is patentable under 35 U.S.C. 102(b) over Bowen et al. (U.S. Patent No. 4,404,995).

Claim 1 describes a method for manufacturing components that appear in a weaving machine and are made in one piece. The method includes one or more first and second parts, said parts being manufactured in separate first and second parts and being joined together to form a whole by means of processes which practically do not change the cross-section of said parts. The first and second parts have different mechanical and/or magnetic and/or tribological

properties; and/or a different manufacturing method; and/or different shape properties according to their functional requirements in the component.

Bowen describes a heddle frame assembly and method for a weaving loom. Stainless steel studs (24) are welded to heddle rods (20) or (22) at spaced intervals. The studs (24) have pointed ends for use during traditional welding. The heddle frame is then assembled.

The creation of a heddle frame in Bowen does not anticipate the Applicant's novel invention.

Claim 1 of the Applicant's invention describes components "joined together to form a whole by means of processes which practically do not change the cross-section of said parts". In order for the Applicant to accomplish the joining, the first and second parts must be joined lengthwise or linearly. In contrast, the heddle frames of Bowen are created by joining the studs perpendicular to the heddle rods. The joining in Bowen increases the cross section of the individual parts, in particular the heddle rods. Bowen cannot join parts without increasing the individual cross sections of the parts. Therefore, Bowen does not anticipate claim 1 of the Applicant's invention.

In fact, Bowen must increase cross sectional area in order to create a complete heddle frame with attached studs for combining different elements of the complete heddle frame. One of the key features of Bowen is the increase in cross sectional area of the heddle rods with the studs so that the slats may be attached. If the components of Bowen were joined lengthwise or end to end, the heddle rods would not function in a useful manner. Bowen cannot function by joining components without increasing cross sectional area of the elements.

The Applicant's invention is used to create components in weaving machines. The components are not intended to function as mounting studs like the devices in Wagner. The

components created by the Applicant's invention do not have increased cross sectional dimensions. The components are attached in a linear fashion to overcome the deficiencies in previous devices. (See, for example, specification pages 1 - 2). Previous devices necessarily were manufactured with materials that were not ideal for each section of the entire component. Because each segment of a component requires different material properties, a balance must be struck to select a material that would function adequately. However, by selecting a material that will work in all zones, not all of the zones receive ideal materials. The Applicant's invention overcomes this limitation by joining components in a linear direction with ideal materials at each individual segment of a larger component.

Therefore, claim 1 is patentable over Bowen.

Claim 4 is patentable under 35 U.S.C. 103(a) over Bowen et al. (U.S. Patent No. 4,404,995).

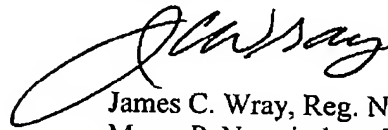
Claim 4 is dependent on independent claim 1. Claim 1 is patentable over Bowen as described above. Claim 4 adds to the patentable features of claim 1 that the parts requiring the most expensive and/or labor-intensive manufacturing method have a length which is shorter than 0.3 meters and the entire components have a length situated between about 0.4 and 2 meters.

This would not have been a matter of design choice. Therefore, claim 4 is patentable over Bowen.

CONCLUSION

Reconsideration and allowance are respectfully requested.

Respectfully,



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